

# iCLASS® Prox Card

13.56 MHz Contactless

Combination Contactless Smart Card and Proximity Card  
PVC Cards 2020, 2021, 2022, 2023, 2024  
Composite PVC/PET cards 2120, 2121, 2122, 2123, 2124



## ACCESS flexibility.

HID's iCLASS® 13.56 MHz read/write contactless smart card technology can be used for diverse applications such as access control, biometrics, cashless vending, public transportation, airline ticketing and customer loyalty programs. Multiple, securely separated files enable numerous applications and support future growth.

The iCLASS Prox Card combines iCLASS 13.56 MHz contactless read/write smart card and Prox 125 kHz proximity technology on a single card with the ability to add magnetic stripe, barcode, and anti-counterfeiting features including custom artwork or a photo identification directly on the credential. Your iCLASS Prox Card can now be utilized for such diverse applications including access control, network log-on security, automotive vehicle identification, cashless vending, time and attendance, and biometric verification. As you integrate and/or migrate to an iCLASS platform from proximity technology readers. And, you have the option of assigning various security levels to the cards depending on the credential holder. The iCLASS Prox Card meets strict ISO thickness standards for use with direct image and thermal transfer printers.

### Features:

- ▶ 13.56 MHz read/write contactless smart card and 125 kHz technology provides high-speed, reliable communications with high data integrity.
- ▶ iCLASS technology ensures high security with mutual authentication, encrypted data transfer, and 64-bit diversified keys for read/write capabilities.
- ▶ Any existing HID format can be factory or field programmed into the secure HID access control application area.
- ▶ Available in 2k bit (256 Byte), 16k bit (2K Byte) or 32k bit (4K Byte) configurations.
- ▶ Meets ISO standards for thickness for use with all direct image and thermal transfer printers.
- ▶ Add a magnetic stripe, barcode, anti-counterfeiting, or photo ID.

### All 2k bit (256 Byte) iCLASS credentials have the following features:

- ▶ Available in two application area configuration only.
- ▶ Provides the HID standard access control application area and one other application area for user customization.
- ▶ Meets ISO 15693 standard for contactless communications.
- ▶ Provides a cost effective way to improve the security of your access control installation.

### All 16k bit (2k Byte) and 32k bit (4k Byte) iCLASS credentials have the following features:

- ▶ Sufficient read/write memory to store multiple biometric templates.
- ▶ 16k available in a two or sixteen application area configuration. 32k available with 16k memory configured in either 2 or 16 application areas, plus an additional 16k user configurable memory.
- ▶ Multiple securely separated files enable numerous applications, including the HID standard access control application, and support future growth.
- ▶ Meets ISO 15693 and I4443B for contactless communications.
- ▶ Meets ISO 15693 and I4443B for contactless communications.

## Features

### Read/Write Functionality for Multi-functional Memory Applications

iCLASS® was specifically designed to make access control more powerful, more versatile, and more secure. All radio frequency data transmission between the card and reader is encrypted using a secure algorithm. By using industry standard encryption techniques, iCLASS reduces the risk of compromised data or duplicated cards. For even higher security, the card data may also be protected with DES or triple DES encryption. Multiple securely separated application areas are each protected by 64-bit diversified read/write keys which allow complex applications and provide for future expansion.

### Proven, Reliable Technology

Security mechanisms such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in transaction times of less than 100 milliseconds for a typical secure e-purse transaction.

### Thin

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions.

### Photo ID Compatible

Can be carried with credit cards in a wallet or purse. Use with a strap and clip as a photo ID badge.

### Long Life

Print directly to the card with a direct image or thermal transfer printer. Slot punch vertically for easy use.

### Durability

Passive, no-battery design allows for an estimated minimum 100,000 reads.

### Options:

Strong, flexible, and resistant to cracking and breaking.

- Magnetic stripe
- External card numbering (inkjet or laser engraving)
- Vertical slot punch
- Custom artwork (text or graphics)

(Please see "How To Order Guide" for a description of the options and associated part numbers.)

### Warranty

Lifetime Warranty. See complete warranty policy for details.

### Base Part Numbers

- 2020 for 2k bit (256 Byte) card
- 2021 for 16k bit (2k Byte) card with 2 application areas
- 2022 for 16k bit (2k Byte) card with 16 application areas
- 2023 for 32k bit (4k Byte) 16k/2+16k/1.
- 2024 for 32k bit (4k Byte) 16k/16 + 16k/1.

### Description

13.56 MHz contactless smart card.  
125 kHz HID Proximity card.

## Specifications

### Typical Maximum Read Range\*

R10 2.0-3.0" (5.0-7.6cm)  
R30/RW300 2.0-3.5" (5.0-8.9cm)  
R40/RW400 2.5-4.5" (6.3-11.4cm)  
RK40/RWK400 3.0-4.0" (7.6-10.1 cm)

\*Dependent upon installation conditions.

### Dimensions

2.127" x 3.375" x 0.033" max. (5.40 x 8.57 x 0.084 cm)

### Weight

0.24oz (6.8 g)

### Card Construction

Thin, flexible polyvinyl chloride (PVC) laminate.

### Operating Temperature

-40° to 158° F (-40° to 70° C)

### Operating Humidity

5-95% non-condensing

### Operating Frequency

13.56 MHz  
125 kHz

### RF Interface

As suggested by ISO/IEC:  
14443B read/write (16k only)  
15693 read/write

### Transaction Time

<100 ms typical

### Baud Rate

14443 B mode - 106 kbps  
15693 mode - 26 kbps

### Memory Type

EEPROM, read/write

### Multi-application Memory

2k bit (256 Byte) card – 2 application areas  
16k bit (2k Byte) – 2 or 16 application areas  
32k bit (4k Byte) card – 16k bit in 2 or 16 application areas plus 16k bit user configurable.

### Write Endurance

Min. 100,000 cycles

### Data Retention

10 years

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MKT-iCLASSPROX\_DS\_EN



**ACCESS** experience.

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